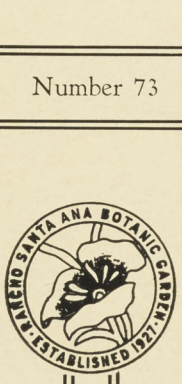
RANCHO SANTA ANA BOTANIC GARDEN
LEAFLETS
of
POPULAR INFORMATION

Number 73 May 26, 1944



1944

RHUS LAURINA

LAUREL-SUMAC

RANCHO SANTA ANA BOTANIC GARDEN
of the
NATIVE PLANTS OF CALIFORNIA
Santa Ana Cañon, Orange County, California
Established 1927 in Memory of
JOHN W. BIXBY

RHUS LAURINA
LAUREL-SUMAC

Anacardiaceae Sumac Family

Evergreen, glabrous shrub, 10-20 ft. high, usually forming a dense, rounded mound. Branches usually less than 6 in. in diam., with smooth gray-brown bark and brittle wood; branchlets reddish-barked. Leaves alternate; petioles to 1½ in. long; blades entire, ovate or lanceolate, rounded at base, 2-4 in. long, ¾-1½ in. wide, coriaceous, dark green, somewhat glossy above, lighter beneath, reddish when young, midrib conspicuous, the 2 halves of blade often folded upward. Flowers produced on new wood, in terminal compound thyrses often 6-8 in. long and 4 or 5 in. wide at base, containing several thousand flowers, these often somewhat light purplish-red in bud, creamy-white when open, scarcely ⅛ in. across. Flowers of 2 sorts, borne on separate plants: one kind has fertile stamens and abortive pistils; the other kind has well-developed pistils and abortive stamens. Sepals 5, persistent; petals 5, deciduous; stamens 5, with 2-celled anthers; ovary 3-celled, set on a disc and bearing 3, more or less distinct styles, only 1 cell fertile. Fruits scarcely ⅛ in. in diam., whitish, oily, fleshy, containing a single seed. In germination the cotyldeons appear above ground, are foliar, petioled and have a broadly-oval blade, ¼ in. long; next 2 leaves opposite, but later ones alternate, these early leaves coarsely-toothed or entire. Flowers in June and July; fruits in September, but drop tardily.

The genus *Rhus* (from an ancient Greek word for some species of sumac) consists of about 150 species found on all continents in temperate and subtropical regions. California has 6 kinds, and another (*R. glabra,* a true *Rhus*) which was long ago collected on Mt. San Jacinto, but has not been rediscovered. The other California species are often regarded as belonging to related genera: *R. diversiloba* (Poison-Oak) to *Toxicodendron; R. integrifolia* (Lemonade-Berry) and *R. ovata* (Sugar-Bush) to *Styphonia; R. trilobata* and its varieties (Squaw-Bush) to *Schmaltzia;* and *R. laurina* to *Malosma* or *Lithraea.*

Rhus laurina (Latin word meaning laurel-like) was described in 1838 by Thos. Nuttall (English-American botanist 1786-1859) who had collected it near Santa Barbara in 1836. Walpers (European botanist, 1816-53) transferred it to *Lithraea,* a South American genus. Recently (1937) Barkley, in studying *Rhus* and related genera, revived the genus *Malosma* (meaning bad smelling), originally proposed in 1883, and which consists only of *R. laurina.* If our plant is to be separated from *Rhus* it should be in *Malosma.*

From Santa Barbara Co. to northern Baja California the Laurel-Sumac, as *R. laurina* is commonly known, is one of the most characteristic large shrubs. It is abundant in the hilly sections from the immediate coast to elevations of over 2000 ft., but it does not reach the deserts. It is commonly associated with Wild-Buckwheat, Sages, Old Man Sage-brush and Deer-Weed, and is less frequent in areas of true chaparral composed of such plants as Mountain-Mahogany, Wild-Lilac and

Chamise. It is much less exacting about soils than many California natives and may be found in almost every type of soil from pure sand to heavy adobe, provided the drainage is good. On south slopes it ordinarily occurs as solitary, well-rounded individuals; in ravines and canyons in thickets; and is usually rare or absent on shady north slopes. This species is particularly sensitive to frosts and is probably the most outstanding native shrub in this regard, for following a severe freeze the foliage and branches are often killed. In fact, its inability to resist frost is possibly the most important factor limiting its distribution, and it probably does not grow in any area where temperatures regularly drop to 25° F. Its distribution in southern California coincides to a remarkable degree with the plantings of citrus, and it is safe to suggest that wherever *R. laurina* grows, that citrus could be planted with reasonable freedom from severe frost injury. For a more accurate appraisal of critical temperatures for subtropicals it would be feasible to rather carefully chart thermal zones by observing the presence or absence of frost damage to *R. laurina* following a severe freeze.

The ability of Laurel-Sumac to remain green and attractive throughout the long dry summer makes it a most valued ornamental plant on many of California's hillsides. Its virtues in this regard are more noticeable because of the browness of the surrounding growth. Plants burned to the ground by fires soon grow new tops and for many years thereafter are usually more attractive than before. It is also an important bee plant, the flowers coming late when many others are gone.

Several years ago we noticed that the partially ripened fruits of *R. laurina* had considerable turpentine-like oil on their surface, but tests made using ether extracts showed that the amount of oil was too small to be of commercial interest.

We have propagated *R. laurina* since 1927, but hardly needed to have done so, for it was one of the few large woody plants native to the Garden area. However, it was deemed advisable to know how to grow it, and later it was decided to use it by the thousands throughout the Garden in an effort to provide a cover-planting of green which would help to blend the more or less patchy specimen plantings into more pleasing unity.

Propagation of *R. laurina* from cuttings is possible, but it is not as satisfactory as by seeds, which should be planted in the fall or spring. Good results can be obtained if small plants are raised in 4-inch pots and set out in late fall or early winter. Irrigation is then only necessary the first season. In rich deep soils the plants will grow to 6 or 8 ft. in 3 or 4 years, but on sterile hillsides may hardly reach 2 ft. Plants in heavy clay thrive only if given no water, and should never be planted in low spots where drainage is poor. Sunny situations are essential for well-rounded. leafy bushes.

R. laurina is less desirable for horticulture than *R. ovata* and *integrifolia* (see Leaflets 21 & 32), but it grows more rapidly and seems to thrive in coastal sections under more trying conditions (frosts excepted) than either of the others.

CARL B. WOLF

RANCHO SANTA ANA BOTANIC GARDEN

Dedication of Garden Foundation to the Board of Trustees for the Rancho Santa Ana Botanic Garden of the Native Plants of California:

"THE NATURE, OBJECT AND PURPOSE OF THE INSTITUTION HEREBY FOUNDED AND TO BE MAINTAINED HEREUNDER.

ITS NATURE: A botanic garden of the native plants of California, herbarium and botanical library, containing living and/or preserved specimens of trees, plants and flowers native to California, and literature relating thereto.

ITS OBJECT: The preservation and improvement of the property now transferred and such property as may hereafter be transferred to the Trustees for those who not only wish to enjoy, but to study, assembled in one accessible locality, native California plants; and for the advancement of science and education with reference to plant life indigenous to the State of California.

ITS PURPOSES: (a) An institution founded primarily for scientific research in the field of local botany.

(b) To preserve the native California flora, try to replenish the depleted supply of some of the rarest plants which are rapidly being exterminated, and bring together in a comparatively small area as complete a collection of the rich store of native California plants as can be grown in this southern section of the state, thereby promoting the general welfare of the people of the state by providing the means for encouraging and carrying on the above mentioned activities in said state and by doing such other things as may be necessary and desirable to carry out the objects hereof."

BOARD OF TRUSTEES

ALLEN L. CHICKERING, Chairman, *San Francisco*
SUSANNA BIXBY BRYANT, *San Marino*
STUART O'MELVENY, *Los Angeles*
IRVING M. WALKER, *Los Angeles*
ERNEST A. BRYANT, JR., *Los Angeles*

GARDEN STAFF

SUSANNA BIXBY BRYANT, Managing Director
CARL B. WOLF (Ph.D. Stanford University), Botanist
PERCY C. EVERETT, Superintendent
E. R. JOHNSON, Construction Engineer

Published by the

DR. ERNEST A. BRYANT GARDEN PUBLICATIONS FUND
RANCHO SANTA ANA BOTANIC GARDEN
R. F. D. Anaheim, California